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AMENDED CLAIM SET

The claims have been amended as follows:

1. (Currently Amended) A method of controlling a solid-state image pickup

apparatus, comprising:

a preparing step of preparing a solid-state image pickup apparatus configured to process

and output an image signal output from a solid-state image sensor that converts an optical image

representative of a field and focused on said solid-state image sensor by a lens to the image

signal, said solid-state image sensor including a plurality of composite pixels which are arranged

in a photosensitive array and each of which includes a main photosensitive cell and an auxiliary

photosensitive cell different in sensitivity from each other and respectively formed by a main

photosensitive portion and an auxiliary photosensitive portion, a plurality of microlenses

respectively positioned in said plurality of composite pixels for focusing incident light, and only

a single a plurality of color component filter segment segments respectively positioned in each of

said plurality of composite pixels, a plurality of color component filter segments being provided

in a preselected color component filter pattern;

a photometry step of executing photometry with the field;

a signal processing step of processing the image signal; and

a control step of switching signal processing of said signal processing step in accordance

with a result of photometry executed in said photometry step;

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wherein, in said signal processing step, color difference gain processing for the image

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signal is switched in accordance with control of said control step to thereby lower a chroma of

the image signal.

2. (Original) The method in accordance with claim 1, wherein said control step

variably controls the signal processing for the image signal in accordance with a focal distance of

the lens.

3. (Original) The method in accordance with claim 2, wherein said control step

variably controls the signal processing for the image signal in accordance with a zoom position

of the lens.

4. (Original) The method in accordance with claim 1, wherein in said signal

processing step tonality correction processing for the image signal is switched in accordance

with the control of said control step.

5. (Original) The method in accordance with claim 4, wherein in said signal

processing step a gamma table to use is switched in accordance with the control of said control

step.

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6. (Original) The method in accordance with claim 1, wherein said control step

determines shading on the basis of the result of photometry and switches the processing of said

signal processing step in accordance with a result of determination.

7. (Original) The method in accordance with claim 6, wherein said photometry

step executes divisional photometry with the field on the basis of the image signal output from

the image sensor, and wherein said control step determines shading on the basis of a result of

said divisional photometry.

8. (Currently Amended) A solid-state image pickup apparatus for processing and

outputting an image signal, comprising: output from

a solid-state image sensor that outputs the image signal and configured to convert an

optical image representative of an objective field and focused on said solid-state image sensor by

a lens to said image signal, said solid-state image sensor including a plurality of composite pixels

which are arranged in a photosensitive array and each of which includes a main photosensitive

cell and an auxiliary photosensitive cell different in sensitivity from each other and respectively

formed by a main photosensitive portion and an auxiliary photosensitive portion, a plurality of

microlenses respectively positioned in said plurality of composite pixels for focusing incident

light, and only a single a plurality of color component filter segment segments respectively

positioned in each of said plurality of composite pixels, a plurality of color component filter

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segments being provided in a preselected color component filter pattern; said apparatus

comprising:

a signal processor configured to process the image signal; and

a controller configured to switch signal processing of said signal processor in accordance

with a result of photometry,;

wherein said controller includes a photometry circuit configured to execute photometry

with the field, said signal processor switching, under control of said controller, color difference

gain processing for the image signal to thereby lower a chroma of said image signal.

9. (Original) The apparatus in accordance with claim 8, wherein said controller

variably controls the signal processing for the image signal in accordance with a focal distance of

the lens.

10. (Original) The apparatus in accordance with claim 9, wherein said controller

variably controls the signal processing for the image signal in accordance with a zoom position

of the lens.

11. (Original) The apparatus in accordance with claim 8, wherein said signal

processor switches tonality correction processing for the image signal under the control of said

controller.

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12. (Original) The apparatus in accordance with claim 11, wherein said signal

processor switches a gamma table to use under the control of said controller.

13. (Original) The apparatus in accordance with claim 8, wherein said controller

determines shading on the basis of the result of photometry and switches the processing of said

signal processor in accordance with a result of determination.

14. (Original) The apparatus in accordance with claim 13, wherein said photometry

circuit executes divisional photometry with the field on the basis of the image signal output from

the image sensor, said controller determining shading on the basis of a result of said divisional

photometry.

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